

SEQUENCE LISTING

<110> ABGENIX, INC.
PUBLIC HEALTH RESEARCH INSTITUTE
PINTER, ABRAHAM
HE, YUXIAN
CORVALAN, JOSE R.

<120> USE OF TRANSGENIC MICE FOR THE EFFICIENT ISOLATION OF
NOVEL HUMAN MONOCLONAL ANTIBODIES WITH NEUTRALIZING
ACTIVITY AGAINST PRIMARY HIV-1 STRAINS

<130> ABX-PHRI PCT

<140> PCT/US02/02171

<141> 2002-01-25

<160> 28

<170> PatentIn Ver. 2.1

<210> 1
<211> 93
<212> PRT
<213> Human immunodeficiency virus type 1

<400> 1
Leu Lys Pro Cys Val Lys Leu Thr Pro Leu Cys Val Thr Leu His Cys
1 5 10 15
Thr Asn Leu Lys Asn Ala Thr Asn Thr Lys Ser Ser Asn Trp Lys Glu
20 25 30
Met Asp Arg Gly Glu Ile Lys Asn Cys Ser Phe Lys Val Thr Thr Ser
35 40 45
Ile Arg Asn Lys Met Gln Lys Glu Tyr Ala Leu Phe Tyr Lys Leu Asp
50 55 60
Val Val Pro Ile Asp Asn Asp Asn Thr Ser Tyr Lys Leu Ile Asn Cys
65 70 75 80
Asn Thr Ser Val Ile Thr Gln Ala Cys Pro Lys Val Ser
85 90

<210> 2
<211> 15
<212> PRT
<213> Human immunodeficiency virus type 1

<400> 2
Ser Thr Asn Leu Lys Asn Ala Thr Asn Thr Lys Ser Ser Asn Trp
1 5 10 15

<210> 3
<211> 15
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 3

Asn	Thr	Lys	Ser	Ser	Asn	Trp	Lys	Glu	Met	Asp	Gly	Glu	Ile	Lys
1				5					10					15

<210> 4

<211> 17

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 4

Thr	Thr	Ser	Ile	Arg	Asp	Lys	Val	Gln	Lys	Glu	Tyr	Ala	Leu	Phe	Tyr
1				5					10					15	

Lys

<210> 5

<211> 35

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 5

Cys	Thr	Arg	Pro	Asn	Asn	Asn	Thr	Arg	Lys	Ser	Ile	Thr	Ile	Gly	Pro
1				5					10					15	

Gly	Arg	Ala	Phe	Tyr	Ala	Thr	Gly	Asp	Ile	Ile	Gly	Asp	Ile	Arg	Gln
			20					25					30		

Ala	His	Cys
		35

<210> 6

<211> 35

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 6

Cys	Thr	Arg	Pro	Ser	Asn	Asn	Thr	Arg	Lys	Ser	Ile	His	Ile	Gly	Pro
1				5					10					15	

Gly	Arg	Ala	Phe	Tyr	Thr	Thr	Gly	Glu	Ile	Ile	Gly	Asp	Ile	Arg	Gln
			20					25					30		

Ala	His	Cys
		35

<210> 7

<211> 33

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 7

Thr	Arg	Pro	Asn	Tyr	Asn	Lys	Arg	Lys	Arg	Ile	His	Ile	Gly	Pro	Gly
1				5					10					15	

Arg Ala Phe Tyr Thr Thr Lys Asn Ile Ile Gly Thr Ile Arg Gln Ala
 20 25 30

His

<210> 8
 <211> 35
 <212> PRT
 <213> Human immunodeficiency virus type 1

<400> 8
 Cys Thr Arg Pro Asn Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro
 1 5 10 15

Gly Arg Ala Phe Tyr Thr Thr Lys Asn Ile Ile Gly Thr Ile Arg Gln
 20 25 30

Ala His Cys
 35

<210> 9
 <211> 20
 <212> PRT
 <213> Human immunodeficiency virus type 1

<400> 9
 Cys Thr Arg Pro Asn Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro
 1 5 10 15

Gly Arg Ala Phe
 20

<210> 10
 <211> 20
 <212> PRT
 <213> Human immunodeficiency virus type 1

<400> 10
 Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn Ile
 1 5 10 15

Ile Gly Thr Ile
 20

<210> 11
 <211> 20
 <212> PRT
 <213> Human immunodeficiency virus type 1

<400> 11
 Tyr Thr Thr Lys Asn Ile Ile Gly Thr Ile Arg Gln Ala His Cys Asn
 1 5 10 15

Ile Ser Arg Ala
 20

<210> 12
 <211> 24
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic peptide

 <400> 12
 Tyr Asn Lys Arg Lys Arg Ile His Ile Gln Arg Gly Pro Gly Arg Ala
 1 5 10 15
 Phe Tyr Thr Thr Lys Asn Ile Ile
 20

<210> 13
 <211> 34
 <212> PRT
 <213> Human immunodeficiency virus type 1

 <400> 13
 Thr Arg Pro Asn Asn Asn Thr Arg Lys Ser Ile Arg Ile Gln Arg Gly
 1 5 10 15
 Pro Gly Arg Ala Phe Val Thr Thr Gly Lys Ile Gly Asn Met Arg Gln
 20 25 30
 Ala His

<210> 14
 <211> 32
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Primer

 <400> 14
 agacatctag aatgagagtg aaggggatca gg 32

<210> 15
 <211> 32
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Primer

 <400> 15
 gctccgaatt cttattatct tttttctctc tg 32

<210> 16
 <211> 8
 <212> PRT
 <213> Human immunodeficiency virus type 1

<400> 16
 Lys Glu Met Asp Gly Glu Ile Lys
 1 5

<210> 17
 <211> 4
 <212> PRT
 <213> Human immunodeficiency virus type 1

<400> 17
 Gly Pro Gly Arg
 1

<210> 18
 <211> 66
 <212> PRT
 <213> Human immunodeficiency virus type 1

<400> 18
 His Cys Thr Asn Leu Lys Asn Ala Thr Asn Thr Lys Ser Ser Asn Trp
 1 5 10 15
 Lys Glu Met Asp Arg Gly Glu Ile Lys Asn Cys Ser Phe Lys Val Thr
 20 25 30
 Thr Ser Ile Arg Asn Lys Met Gln Lys Glu Tyr Ala Leu Phe Tyr Lys
 35 40 45
 Leu Asp Val Val Pro Ile Asp Asn Asp Asn Thr Ser Tyr Lys Leu Ile
 50 55 60
 Asn Cys
 65

<210> 19
 <211> 78
 <212> PRT
 <213> Human immunodeficiency virus type 1

<400> 19
 Asn Cys Ile Asp Leu Arg Asn Ala Thr Asn Ala Thr Ser Asn Ser Asn
 1 5 10 15
 Thr Thr Asn Thr Thr Ser Ser Ser Gly Gly Leu Met Met Glu Gln Gly
 20 25 30
 Glu Ile Lys Asn Cys Ser Phe Asn Ile Thr Thr Ser Ile Arg Asp Lys
 35 40 45
 Val Gln Lys Glu Tyr Ala Leu Phe Tyr Lys Leu Asp Ile Val Pro Ile
 50 55 60
 Asp Asn Pro Lys Asn Ser Thr Asn Tyr Arg Leu Ile Ser Cys
 65 70 75

<210> 20
 <211> 66
 <212> PRT

<213> Human immunodeficiency virus type 1

<400> 20

Asn Cys Val Lys Asp Val Asn Ala Thr Asn Thr Thr Asn Asp Ser Glu
1 5 10 15

Gly Thr Met Glu Arg Gly Glu Ile Lys Asn Cys Ser Phe Asn Ile Thr
20 25 30

Thr Ser Ile Arg Asp Glu Val Gln Lys Glu Tyr Ala Leu Phe Tyr Lys
35 40 45

Leu Asp Val Val Pro Ile Asp Asn Asn Asn Thr Ser Tyr Arg Leu Ile
50 55 60

Ser Cys
65

<210> 21

<211> 72

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 21

Asn Cys Thr Asp Leu Arg Asn Ala Thr Asn Gly Asn Asp Thr Asn Thr
1 5 10 15

Thr Ser Ser Ser Arg Gly Met Val Gly Gly Gly Glu Met Lys Asn Cys
20 25 30

Ser Phe Asn Ile Thr Thr Asn Ile Arg Gly Lys Val Gln Lys Glu Tyr
35 40 45

Ala Leu Phe Tyr Lys Leu Asp Ile Ala Pro Ile Asp Asn Asn Ser Asn
50 55 60

Asn Arg Tyr Arg Leu Ile Ser Cys
65 70

<210> 22

<211> 67

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 22

Lys Cys Thr Asp Leu Lys Asn Asp Thr Asn Thr Asn Ser Ser Ser Gly
1 5 10 15

Arg Met Ile Met Glu Lys Gly Glu Ile Lys Asn Cys Ser Phe Asn Ile
20 25 30

Ser Thr Ser Ile Arg Gly Lys Val Gln Lys Glu Tyr Ala Phe Phe Tyr
35 40 45

Lys Leu Asp Ile Ile Pro Ile Asp Asn Asp Thr Thr Ser Tyr Lys Leu
50 55 60

Thr Ser Cys
65

<210> 23
 <211> 72
 <212> PRT
 <213> Human immunodeficiency virus type 1

 <400> 23
 Asn Cys Thr Asp Leu Arg Asn Thr Thr Asn Thr Asn Asn Ser Thr Ala
 1 5 10 15
 Asn Asn Asn Ser Asn Ser Glu Gly Thr Ile Lys Gly Gly Glu Met Lys
 20 25 30
 Asn Cys Ser Phe Asn Ile Thr Thr Ser Ile Arg Asp Lys Met Gln Lys
 35 40 45
 Glu Tyr Ala Leu Leu Tyr Lys Leu Asp Ile Val Ser Ile Asn Asp Ser
 50 55 60
 Thr Ser Tyr Arg Leu Ile Ser Cys
 65 70

<210> 24
 <211> 71
 <212> PRT
 <213> Human immunodeficiency virus type 1

 <400> 24
 Asn Cys Thr Asp Leu Gly Lys Ala Thr Asn Thr Asn Ser Ser Asn Trp
 1 5 10 15
 Lys Glu Glu Ile Lys Gly Glu Ile Lys Asn Cys Ser Phe Asn Ile Thr
 20 25 30
 Thr Ser Ile Arg Asp Lys Ile Gln Lys Glu Asn Ala Leu Phe Arg Asn
 35 40 45
 Leu Asp Val Val Pro Ile Asp Asn Ala Ser Thr Thr Thr Asn Tyr Thr
 50 55 60
 Asn Tyr Arg Leu Ile His Cys
 65 70

<210> 25
 <211> 10
 <212> PRT
 <213> Human immunodeficiency virus type 1

<400> 25
 Tyr Thr Thr Lys Asn Ile Ile Gly Thr Ile
 1 5 10

<210> 26
 <211> 9
 <212> PRT
 <213> Human immunodeficiency virus type 1

<400> 26
 Gln Lys Glu Tyr Ala Leu Phe Tyr Lys

1

5

<210> 27

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 27

Ser Thr Arg Pro Ser Asn Asn Thr Arg Lys Ser Ile His Ile Gly Pro
1 5 10 15

Gly Arg Ala Phe Tyr Thr Thr Gly Glu Ile Ile Gly Asp Ile Arg Gln
20 25 30

Ala His Cys
35

<210> 28

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: 6 His tag

<400> 28

His His His His His His
1 5

1

9